IN THE CLAIMS:

Please amend claims 2-6, indicated at being allowable, as follows:

2. An interferometric coupler, comprising:
a first amplifying part (2), and
a second transparent part (4) to guide radiation previously amplified in the first part;
wherein the first and second parts are separated by a curved interface (6).

3. An interferometric coupler, comprising:
a first amplifying part (2), and
a second transparent part (4) to guide radiation previously amplified in the first part;
wherein the first and second parts are separated by a V-shaped interface (6).

4. An interferometric coupler, comprising:
a first amplifying part (2), and
a second transparent part (4) to guide radiation previously amplified in the first part;
wherein the first and second parts are separated by a zigzag shaped interface (6).

5. An interferometric coupler, comprising:
a first amplifying part (2), and
a second transparent part (4) to guide radiation previously amplified in the first part;
wherein the first and second parts are separated by an inclined interface (6) on a path of input (8) and output (10) rays.

6. An interferometric coupler, comprising:
a first amplifying part (2), and
a second transparent part (4) to guide radiation previously amplified in the first part;
wherein the first and second parts are laid out to be approximately perpendicular to a path of an incident beam (8) and an output beam (10).

Please amend claims 1, 7-15 as follows:

1. An interferometric coupler, comprising:
a first amplifying part (2), and
a second transparent part (4) to guide radiation previously amplified in the first part.

7. The coupler according to any of claims 1-6, wherein a signal mode guide is placed at an output of the second part.

8. The coupler according to claim 1, wherein the amplifier material is a structure embedded in an InP substrate.

9. The coupler according to claim 1, wherein the amplifying material is a laser material.

10. The coupler according to claim 9, wherein the laser material is an InGaAsP quaternary.

11. The coupler according to claim 1, wherein the amplifying material has quantic wells.

12. An optical amplifier comprising:
an optical pre-amplifier, and
a coupler according to one of claims 1 to 6 and 8-11.

13. Process for amplifying the power of a light source emitting radiation, consisting of placing a coupler according to any of claims 1 to 6 and 8-11, in the path of the said radiation.

14. Process to compensate for losses in an optical fiber consisting of placing a coupler according to any one of claims 1 to 6 and 8-11, in the path of radiation passing through the optical fiber.

15. Process for amplification of signals multiplexed in wave length, consisting of increasing the output power using a coupler according to one of claims 1 to 6 and 8-11.